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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,660	09/30/2003	Timothy M. Simon	32355.12.44.4	5821

22859 7590 07/10/2008
INTELLECTUAL PROPERTY GROUP
FREDRIKSON & BYRON, P.A.
200 SOUTH SIXTH STREET
SUITE 4000
MINNEAPOLIS, MN 55402

EXAMINER

WILLSE, DAVID H

ART UNIT	PAPER NUMBER
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3738

MAIL DATE	DELIVERY MODE
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07/10/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/675,660	Applicant(s) SIMON ET AL.	
	Examiner Dave Willse	Art Unit 3738	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12 and 15-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12 and 15-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 18 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 18, line 2, “the distal end” and “the proximal end” lack proper antecedent bases. In claim 24, last line, “hardness’s” should be deleted.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12, 16, 18, 21, 22, and 24-30 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Stone et al., US 5,306,311, which discloses a cartilage plug **10** having a lubricious surface (column 7, lines 49-53) and a plurality of ridges **14** concentric about axis **11** (column 6, lines 3-5; column 18, lines 4-6) to thereby define respective parallel planes substantially perpendicular to said axis (Figure 4A). As noted in the Office action of April 16, 2007, the word

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“periphery” is defined as “the external boundary or surface of a body” (*Merriam Webster’s Collegiate Dictionary*, 10th edition, 1996) and is broad enough to encompass boundaries along any of the three dimensions (e.g., claim 12, line 3) of the preformed mass, and “outermost” means “farthest out” (*ibid.*) and is unspecific as to direction (or dimension) and a point (or plane) of reference. As indicated in the Advisory Action of April 11, 2008, nothing in claim 12 and others requires that the periphery be “outermost” or “maximal” in *distance from the central axis* relative to other peripheries. And the instant specification does not set forth a pertinent definition of the newly added term “maximal” in a manner prescribed by MPEP § 2111.01. Regarding claim 16, matrix **12** has a cylindrical shape. Regarding claim 24 and others, the plurality of ridges **14** can take the form of a single helix about central axis **11** (column 6, lines 5-8; column 9, lines 48-51); the plug **10** is formed of laminated materials of different hardness (column 10, lines 16-34; Table 1; etc.). Regarding claim 25 and others: column 3, lines 15-17.

Claims 15, 17, 19, 20, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stone et al., US 5,306,311. Regarding claims 15 and 20, discontinuous ridges with a barb shaped cross-section would have been an obvious modification to the ordinary practitioner in order to facilitate self-tapping and locking into the bone, with further motivation having been provided by the paragraph at column 6, lines 3-16. Regarding claim 17, a polyhedral shape would have been obvious in order to better resist torsion. Regarding claim 23, the bores **126** having ridges therein would have been obvious so as to enhance the interlocking of the fibers forced into said bores (column 10, lines 22-24).

Claims 25 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson, US 6,120,541, in view of Stone et al., US 5,306,311. Johnson discloses a cartilage plug

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16 for insertion into a void **12** in cartilaginous tissue **10** (Figures 1 and 2), the cartilage plug having a plurality of ridges in the form of a single helix (column 1, lines 51-53) formed outward of and extending about an outermost periphery so as to securely engage the wall **14** thread formed by the tap (column 1, lines 48-49; column 1, line 58, through column 2, line 3). Johnson is silent as to particular materials and thus lacks a description of porous surfaces and a lubricious surface on at least one end of the plug **16**. However, such features were well known in the art at the time of the present invention, as seen from the Stone et al. teaching, for example, and to fabricate the plug **16** of Johnson so as to have porous surfaces and a lubricious surface would have been obvious in order to facilitate “the ingrowth of articular chondrocytes” (Stone et al.: column 3, lines 15-18; column 6, lines 10-16; etc.) and in order to provide lubrication to the joint articular surface (Stone et al.: column 1, lines 24-29; column 7, lines 49-56; etc.), with the ordinary practitioner having been left to select an appropriate material.

The Applicant’s remarks have been considered and are addressed in the grounds of rejection above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dave Willse, whose telephone number is 571-272-4762 and who is generally available Monday, Tuesday, and Thursday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott, can be reached on 571-272-4754. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

**/Dave Willse/
Primary Examiner
Art Unit 3738**